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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/787,081

02/27/2004

Kenshi Aihara

AIHARA1

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1444 7590 09/01/2006

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EXAMINER

PRESTON, ERIK D

ART UNIT

PAPER NUMBER

2834

DATE MAILED: 09/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/787,081	Applicant(s) AIHARA, KENSHI	
	Examiner Erik D. Preston	Art Unit 2834	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 06/19/2006 has been entered.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 12,13,15 & 19-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Mizutani (US 5602432 previously cited).

With respect to claims 12 & 19, Mizutani teaches a vibrator comprising: A coreless coil (Fig. 18, #2) having an axis and being disposed in a central portion of the vibrator (having a diameter that is elongated with respect to its thickness); a driver including a magnet (Fig. 18, #3) to be inserted in said coreless coil, a yoke (Fig. 18, #30a & 30b) for sandwiching said coreless coil and opposing said magnet and a top plate (of the type as seen in the center of Fig. 17, #7); at least one suspension (Fig. 18, #7) for resiliently carrying said driver, wherein the at least one suspension comprises a

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first pair of plate springs (two of Fig. 19, #72 located on quadrants directly across from each other) disposed in axisymmetrical positions to support from both sides of the driver and extending along the radial direction, wherein the pair of plate springs disposed at the both sides of the driver are arranged on a line extending in a substantially perpendicular direction to the axis, wherein an outer end of each plate spring is fixed and an inner end of each plate spring which is opened (free to move) supports the driver (as seen in Fig. 18), wherein the opened inner ends of the pair of plate springs support the driver from both sides (as seen in Fig. 19).

With respect to claims 13 & 20, Mizutani teaches the vibrator of claims 12 & 19, wherein an alternate current is applied to said coreless coil to generate vibrations by reciprocation of said driver in the axial direction (Col. 12, Lines 6-10).

With respect to claims 15 & 21, Mizutani teaches the vibrator of claims 12 & 19, further comprising a second suspension (Fig. 18, #70) for supporting the driver resiliently and disposed in axisymmetrical portions parallel to the first pair of plate springs.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mizutani (US 5602432 previously cited) in view of Kobayashi et al. (WO/01/94035).

With respect to claim 16, Mizutani teaches the vibrator of claim 12, but it does not teach a case wherein the coreless coil, the driver and the at least one suspension are contained in the case. However, Kobayashi teaches a case (Fig. 2B, #12) for a vibrator, wherein the case contains a coreless coil (Fig. 2B, #4), a driver (Fig. 2B, #3) and at least one suspension (Fig. 2B, #2). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the vibrator of Mizutani in view of the case as taught by Kobayashi because it provides a means for housing a vibration generating device (Paragraphs 12 & 55 of English language equivalent US 2003/0072441).

With respect to claim 17, Mizutani in view of Kobayashi teaches the vibrator of claim 16, and Kobayashi teaches that the case includes a frame having an opening for surrounding the driver, a base (Fig. 2B, #6) for fixing the coreless coil and closing one side of the opening of the frame, and a protector (as seen near the top of Fig. 2B) for closing the other side of the opening of the frame.

With respect to claim 18, Mizutani in view of Kobayashi teaches the vibrator of claim 17, and Mizutani teaches that the case has a spacer (the raised portion seen near the outer periphery of Fig. 18, #1), the at least one suspension being fixed between the spacer and the frame (Fig. 18, #10).

Allowable Subject Matter

Claim 14 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: While prior art does teach some of the material included in claim 14, it does not teach the combination comprising a pair of weights attached to both sides of the yoke.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Erik D. Preston whose telephone number is (571)272-8393. The examiner can normally be reached on Monday through Friday 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on (571)272-2044. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



08/23/2006



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